

Stratosphere

**Increased
Planetary
Albedo**

**Heterogeneous
Chemistry**

$h\nu$ & OH

N_2O_5
 $ClONO_2$
HCl

HNO_3
ClO

SO_2

HCl

Ash

$SO_2 \rightarrow H_2SO_4$

Warming

**Nucleation and
Particle Growth**

Rainout
 H_2O , HCl, Ash

**Removal
Processes**

Troposphere

Cirrus Modification

Infrared

Surface cools

